

WHAT IS CLAIMED IS:

1 5 1. A communication switch having a fail-over circuit, characterized in that the circuit passes inbound signals for transmission on a data network when the circuit is in a first state and redirects the inbound signals for transmission on a telephone network when the circuit is in a second state.

10 10 2. The communication switch of claim 1, wherein the inbound signals are non-local telephone calls.

15 15 3. The communication switch of claim 1, further characterized in that the circuit passes inbound local signals directed to a local host to an internal switch for internally routing the inbound local signals to the telephone network when the circuit in the first state.

20 20 4. The communication switch of claim 3, wherein the inbound local signals are local telephone calls.

25 25 5. The communication switch of claim 1, characterized in that the circuit transitions from the first state to the second state upon occurrence of an operational condition.

30 30 6. The communication switch of claim 5, wherein the operational condition is a failure condition.

35 35 7. The communication switch of claim 5, wherein the operational condition is a transmission error.

8. The communication switch of claim 5, wherein the operational condition is power loss.

5

9. The communication switch of claim 5, wherein the operational condition is a malfunction of a portion of the communication switch.

10

10. A voice communication network comprising:
a communication switch; and
a telephone network connection coupled to the communication switch, characterized in that the communication switch redirects inbound signals to the telephone network connection upon occurrence of an operational condition.

15

11. The voice communication network of claim 10, wherein the switch includes a fail-over circuit for redirecting the inbound signals to the telephone network connection.

20

12. The voice communication network of claim 10, wherein the inbound signals are non-local telephone calls.

25

13. The voice communication network of claim 10, further characterized in that the communication switch passes the inbound signals to the telephone network connection if the inbound signals are local telephone calls directed to a local host.

30

14. The voice communication network of claim 13, wherein the communication switch includes an internal switch for passing the local telephone calls to the network telephone connection.

35

15. The voice communication network of claim 10, wherein
the operational condition is a failure condition.

5

16. The voice communication network of claim 10, wherein
the operational condition is a transmission error.

10 17. The voice communication network of claim 10, wherein
the operational condition is power loss.

15 18. The voice communication network of claim 10, wherein
the operational condition is a malfunction of a portion of the
communication switch.

19. A communication switch in a voice communication
network comprising:

20 an input for receiving an inbound first signal;
a circuit transitioning from a first state to a second
state;

25 a processor coupled to the circuit, the processor
configured to detect an occurrence of an operational condition
and transmit a second signal to the circuit for transitioning the
circuit from the first state to the second state;

a first output transmitting the inbound first signal over
a data network if the circuit is in the first state; and

30 a second output transmitting the inbound first signal over
a telephone network if the circuit is in the second state.

20. The communication switch of claim 19, wherein the
operational condition is a failure condition.

35

21. The communication switch of claim 19, wherein the operational condition is a transmission error.

5

22. The communication switch of claim 19, wherein the operational condition is a malfunction of a portion of the communication switch.

10

23. The communication switch of claim 19, wherein the operational condition is power loss.

15

24. The communication switch of claim 19, wherein the inbound first signal is a non-local telephone call.

20

25. The communication switch of claim 19, wherein the second signal is a transitioning signal for transitioning the circuit.

25

26. The communication switch of claim 19 further including an internal switch for transmitting inbound local signals directed to a local host to the telephone network when the circuit is in the first state.

30

27. The communication switch of claim 19, wherein the inbound local signals are local telephone calls.

28. In a voice communication network including a communication switch having a fail-over circuit, a method for transmitting an inbound first signal comprising the steps of:
receiving the inbound first signal;

35

transitioning the fail-over circuit from a first state to a second state;

5 passing the inbound first signal for transmission on a data network if the fail-over circuit is in the first state; and

redirecting the inbound telephone call for transmission on a telephone network if the fail-over circuit is in the second state.

10

29. The method of claim 28 further comprising the steps of: detecting an operational condition; and

transmitting a second signal to the fail-over circuit to transition from the first state to the second state upon 15 detecting the operational condition.

30. The method of claim 29, wherein the operational condition is a failure condition.

20

31. The method of claim 29, wherein the operational condition is a transmission error.

25 32. The method of claim 29, wherein the operational condition is a malfunction of a portion of the communication switch.

30 33. The method of claim 29, wherein the operational condition is power loss.

35 34. The method of claim 29, wherein the second signal is a transitioning signal for transitioning the fail-over circuit.

35. The method of claim 28, wherein the inbound first signal is a non-local telephone call.

5

36. The method of claim 28 further comprising the steps of:

receiving an inbound local signal; and

10 passing the inbound local signal to an internal switch for internally routing the local signal to the telephone network when the circuit is in the first state.

37. A communication network comprising:

15 a communication switch;

a data network connection coupled to the communication switch; and

20 a telephone network connection coupled to the communication switch characterized in that the communication switch routes inbound signals on the data network connection prior to occurrence of a failure condition.

25 38. The communication network of claim 37, further characterized in that the communication switch redirects inbound signals to the telephone network connection after the occurrence of the failure condition.

30

35